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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,229	01/29/2002	Stephen John Hinde	1509-266	2259
22879	7590	02/17/2006	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			MICHALSKI, JUSTIN I	
		ART UNIT	PAPER NUMBER	
			2644	

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/058,229	HINDE, STEPHEN JOHN
	Examiner Justin Michalski	Art Unit 2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 06 December 2005.  
 2a) This action is FINAL. 2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19 and 21-48 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-19 and 21-48 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 3,16, and 21 are objected to because of the following informalities:

Claim 3, lines 2-3 contain “so the audio-cursor sound source is aligned it with” which is unclear. The office has interpreted it as “so the audio-cursor sound source is aligned with”.

Claim 16, lines 2-3 contain “the modifying the layout” which is unclear. The office has interpreted it as “modifying the layout”.

Claim 21, line 7 contains “to provide sounds their” which is unclear. The Office has interpreted this as “to provide sounds to their”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-19, 21-23, 25-43, and 45-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmandt, C., “Audio Hallway: a Virtual Acoustic Environment for Browsing,” ACM 0-58113-034-1/98/11, UIST '98, San Francisco, CA (Hereinafter “Schmandt”).

Regarding Claims 1 and 21, Schmandt discloses an audio user-interfacing method and apparatus for which services are represented by audio labels presented in an audio field through respective synthesized sound sources, the method comprising:

(a) storing, for each service to be represented, service access data and data associating the service with at least one said sound source and specifying at least one audio label (Fig. 5); (b) generating an audio field in which said sound sources are synthesized at respective rendering positions to sound their associated service-representing audio labels and thereby present the user with a choice of services (Fig. 5); (c) selecting a service by indicating the selected service through its audible representation, and (d) modifying the audio-field layout of (i) the service-representing sound sources and/or (ii) what services are represented in the audio field (paragraph bridging pages 167 and 168).

Regarding Claims 2 and 22, Schmandt discloses wherein step (c) includes the selecting and modifying steps being performed by a user of the method rotating and/or displacing the audio field to bring the sound source of a target service so the sound source lies in a predetermined selection direction (paragraph bridging pages 167-168).

Regarding Claims 3 and 23, Schmandt further disclose moving an audio-cursor sound source in the audio field so the audio-cursor sound source is aligned with the sound source of a target service (Fig. 6, paragraph bridging page 167 and 168).

Regarding Claims 6 and 26, Schmandt further discloses the access data of a said service is the path name on a local machine of a service executable file (Sound files, page 169, first full paragraph).

Regarding Claims 7 and 27, Schmandt further discloses the access data of a said service is the address of a service resource on a remote machine to be accessed over a communications connection (Schmandt discloses use of a computer, paragraph bridging pages 168 and 169, which will inherently include communication connections to access data).

Regarding Claim 8 and 28, Schmandt further discloses the service comprises an entertainment service (page 164, first paragraph under "Audio files from radio news").

Regarding Claims 9 and 29, Fig. 5 discloses two degrees of freedom.

Regarding Claims 10 and 30, Schmandt further discloses said audio label is a descriptor (i.e. news description audio file Fig. 5, page 164).

Regarding Claims 11 and 31, Schmandt further discloses at least one audio label is an audio feed from the service concerned (page 164, first paragraph under "Audio files from radio news").

Regarding Claim 12 and 32, Schmandt further discloses the audio label is a distinctive sound (Sound files, page 169, first full paragraph).

Regarding Claims 13 and 33, Schmandt further discloses user selects audio label (Fig. 6).

Regarding Claims 14 and 34, Schmandt further discloses the service provides the label (i.e. news audio).

Regarding Claims 15 and 35, Schmandt further discloses a service providing service-related events through a sound source (Figs. 5 and 6).

Regarding Claims 16 and 36, Schmandt further discloses the rendering positions of said sound sources are specified relative to an audio-field reference, modifying the layout of the service-representing sound sources through the modification of the rendering positions of individual sound sources (Figs. 5-6).

Regarding Claims 17 and 37, Schmandt further discloses varying the rendering positions of said sound source by varying an offset between (a) an audio-field relative to which the sounds sources are positioned in the audio field, and (b) a presentation reference determined by a mounting configuration of audio output devices through which the sound sources are synthesized. (Figs 5 and 6, page 169 first full paragraph).

Regarding Claims 18 and 38, Schmandt further discloses world stabilization.

Regarding Claims 19 and 39, Schmandt further discloses the offset is varied in response to user input via an input device (sensor, page 169 first full paragraph).

Regarding Claim 40, Schmandt further discloses enabling a user to modify which services are represented in the audio field (Fig. 6).

Regarding Claim 41, Schmandt discloses an apparatus for providing an audio user interface in which services are represented by audio labels presented in an audio field through respective synthesized sound sources the apparatus comprising: a memory for storing, for each service to be represented, service access data and data associating the service with at least one said sound source and specifying at least one audio label (pave 169 1<sup>st</sup> paragraph); a rendering subsystem arranged to generate, through audio output devices, an audio field in which said sound sources are adapted to be synthesized at respective rendering positions to provide sounds for their associated

service-representing audio labels; a selection arrangement operative to select a represented service by identifying it though at least one of its sound source and audio label (page 169 paragraphs 1-3); and user input functionality for enabling a user to modify the audio-field layout of the service-representing sound sources and/or what services are represented in the audio field (Figs. 5 and 6).

Regarding Claim 42, Schmandt further discloses the selection arrangement comprises an arrangement for rotating and/or displacing the audio field to bring the sound source of a target service to lie in a predetermined selection direction, and an arrangement for inputting a select command to select a service whose sound source is aligned with said selection direction (paragraph bridging pages 167-168).

Regarding Claim 43, Schmandt further discloses an arrangement for moving an audio-cursor sound source in the audio field to align it with the sound source of a target service, and an arrangement for inputting a select command to select a service with which the sound source is aligned (Fig. 6, paragraph bridging page 167 and 168).

Regarding Claims 5, 25, and 45, Schmandt further discloses the sound source is replaced by an audio interface to the service (audio output from sound file Fig. 6).

Regarding Claims 46-48, Schmandt further discloses the user modifying the service representing sound sources (Fig. 6, paragraph bridging page 167 and 168).

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 24, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmandt as applied to claims 1, 21, and 41 respectively above.

Schmandt discloses a method and apparatus as stated above but does not disclose the user speaking the audio label of a target service, and using a speech recognizer to match, the spoken label to the stored audio labels. However, using speech recognition is notoriously well known in the art for selecting services. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use speech recognition to select a service. One would have been motivated to do so in order to permit blind or visually impaired users to select a service without the use of sight.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM

February 8, 2006



HUYEN LE  
PRIMARY EXAMINER